9. DATA

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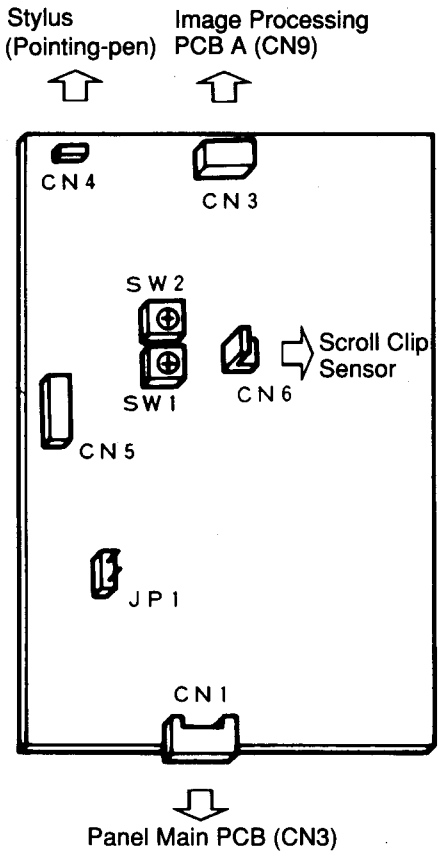
4. Description of PCBs

1. DIGITIZER PCB (In RC5600D)

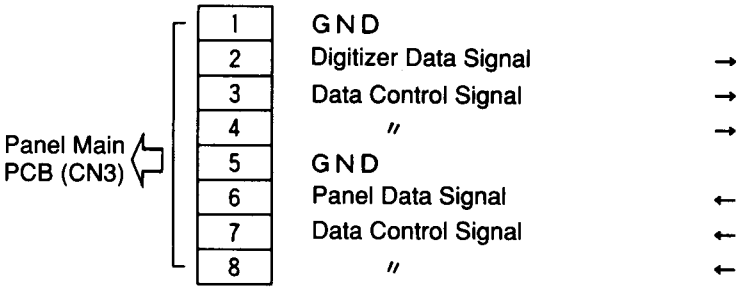


SW1 For compensation of the position discrepancy in the main scanning direction (laterally)

SW2 For compensation of the position discrepancy in the sub scanning direction (vertically)

JP1 Used only for adjustment in factory

CN1



CN3

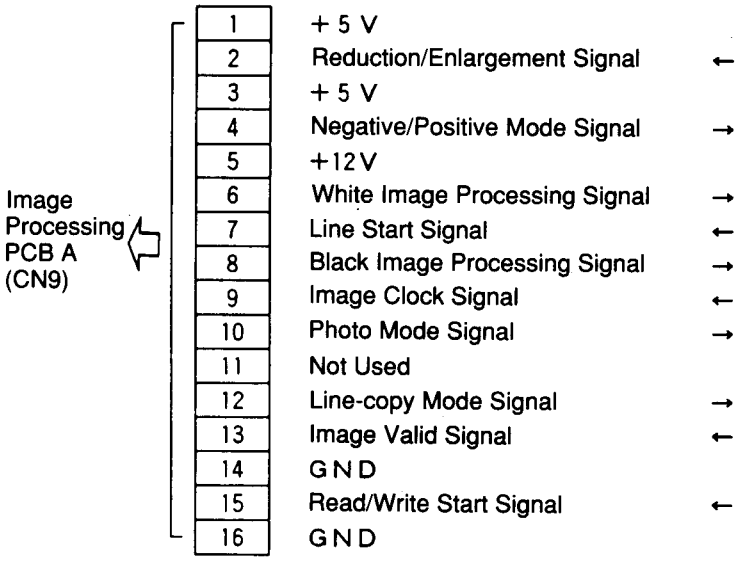
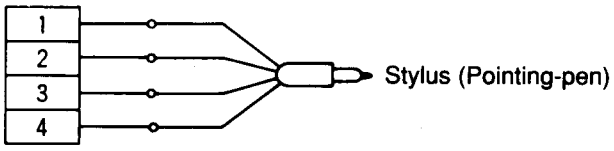
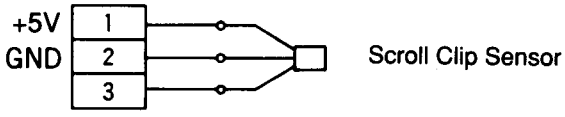


Image Processing PCB A (CN9)
1 + 5 V
2 Reduction/Enlargement Signal ←
3 + 5 V
4 Negative/Positive Mode Signal →
5 +12V
6 White Image Processing Signal →
7 Line Start Signal ←
8 Black Image Processing Signal →
9 Image Clock Signal ←
10 Photo Mode Signal →
11 Not Used
12 Line-copy Mode Signal →
13 Image Valid Signal ←
14 GND
15 Read/Write Start Signal ←
16 GND

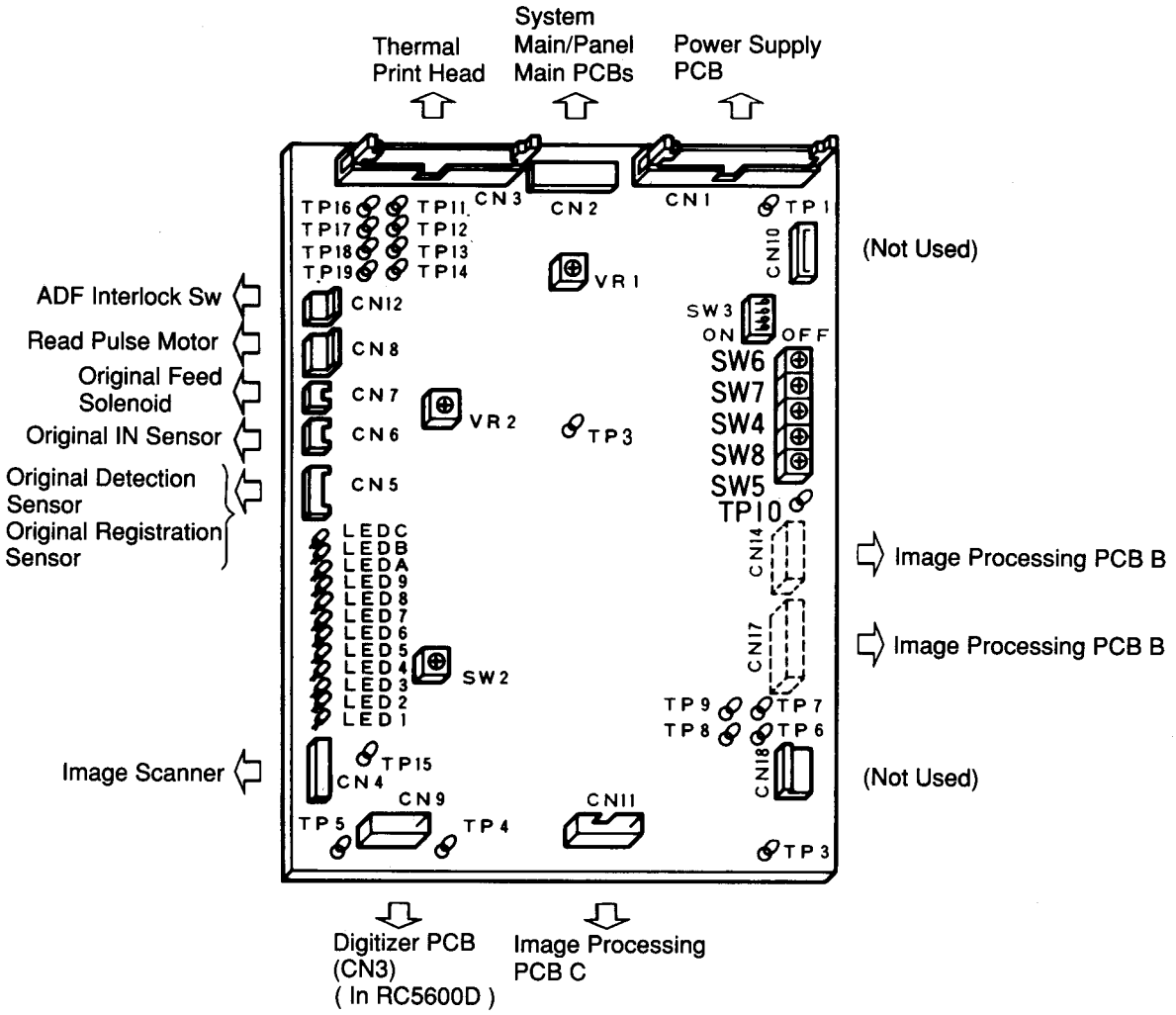
CN4



CN6



2. IMAGE PROCESSING PCB A



LED	– When LED is ON –
LED1:+5V	+5V is supplied into PCB.
LED2:+12V	+12V is supplied into PCB.
LED3:–12V	–12V is supplied into PCB.
LED4:+24V	+24V is supplied into PCB.
LED5:INJI	"Read/Write Start Signal" is output.
LED6:SHAD	"Shading Compensation Signal" is output.
LED7:RPEN	"Read Pulse Motor ON Signal" is output.
LED8:RPRV	"Read Pulse Motor CCW Signal" is output. (CCW : The rotation direction in picking up an original)
LED9:SBSL	"Original Feed Solenoid ON Signal" is output.
LEDA:GKIS	The light path of Original IN Sensor is blocked.
LEDB:GKSW	The actuator of Original Detection Sensor is raised to open the light path.
LEDC:RGSS	The actuator of Original Registration Sensor is raised to open the light path.

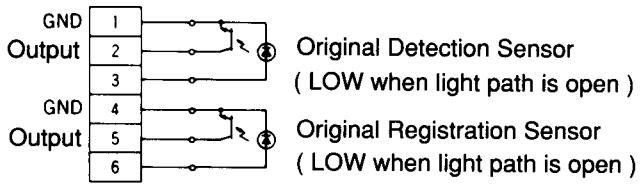
VR

VR1:NOD	For contrast level adjustment in image scanning (The contrast will be darker by turning it clockwise.)
VR2:GEN	For detection sensitivity adjustment of Original IN Sensor (The sensitivity goes up by turning it counterclockwise.)

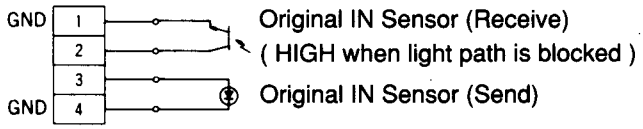
SW

SW2:GAIN	For contrast balance adjustment in image scanning
SW3: (4 DIP Switches)	Used only for adjustment in factory (All 4 DIP Switches must be OFF.)
SW4:KAN	Not Used
SW5:T1	For adjustment of heating power of Thermal Print Head
SW6:MAS	For adjustment of "Line-copy mode Slice Level"
SW7:TP	Not Used
SW8:T2	For adjustment of heating power of Thermal Print Head

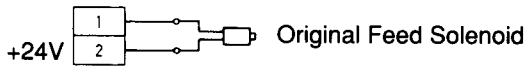
CN5 6 pins



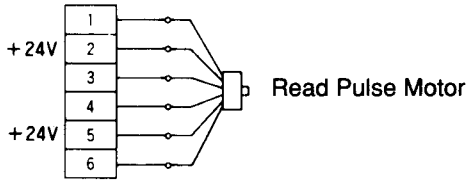
CN6 4 pins



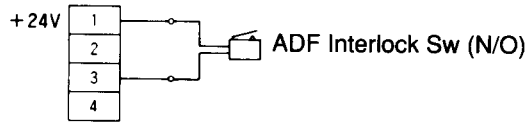
CN7 2 pins



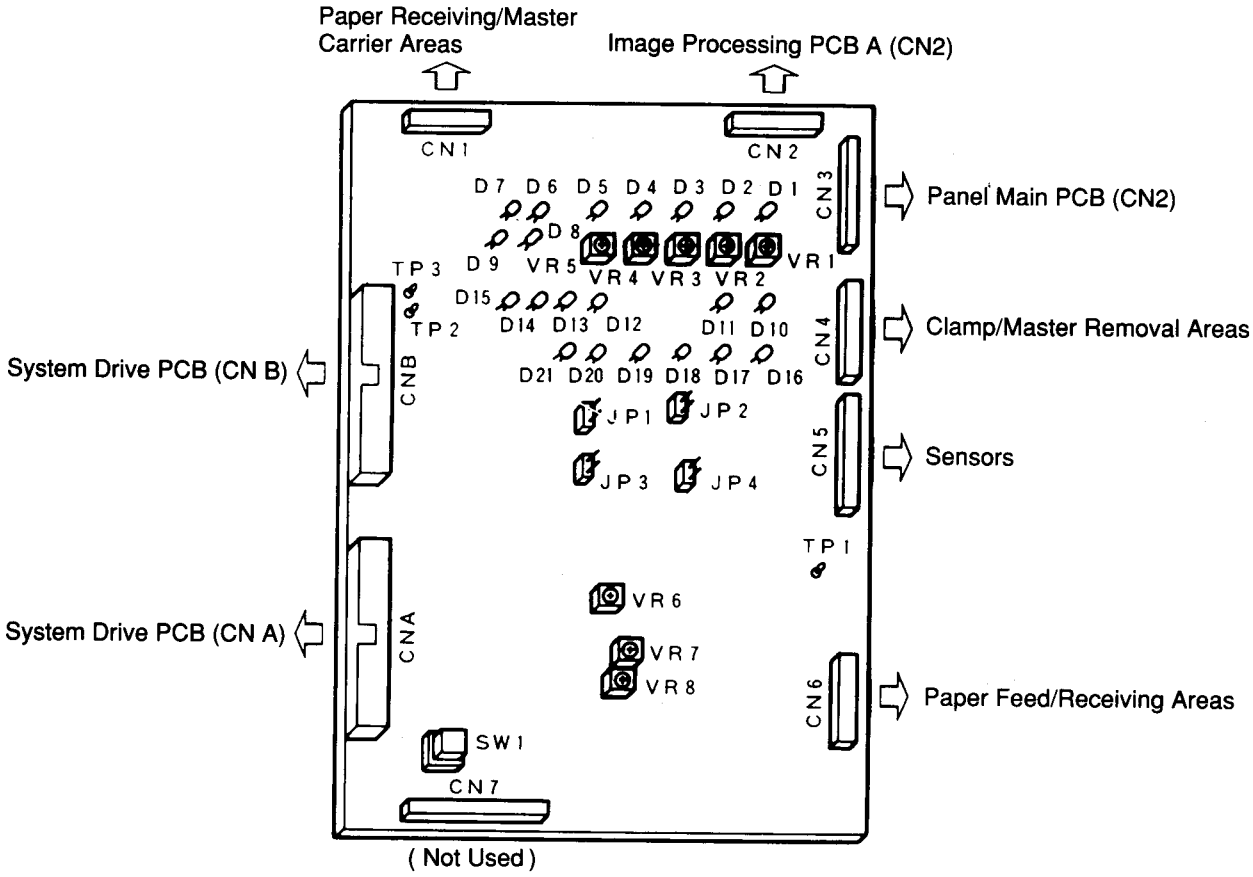
CN8 6 pins



CN12 4 pins



3. SYSTEM MAIN PCB



JP

JP1	Used only for adjustment in factory
JP2	Used only for adjustment in factory
JP3	For "Key/Card Counter" installation (Opened in installing "Key/Card Counter")
JP4	Used only for adjustment in factory

TP

TP1:GND1	Ground
TP2:GND1	Ground
TP3:GND2	Ground for 24V lines

SW

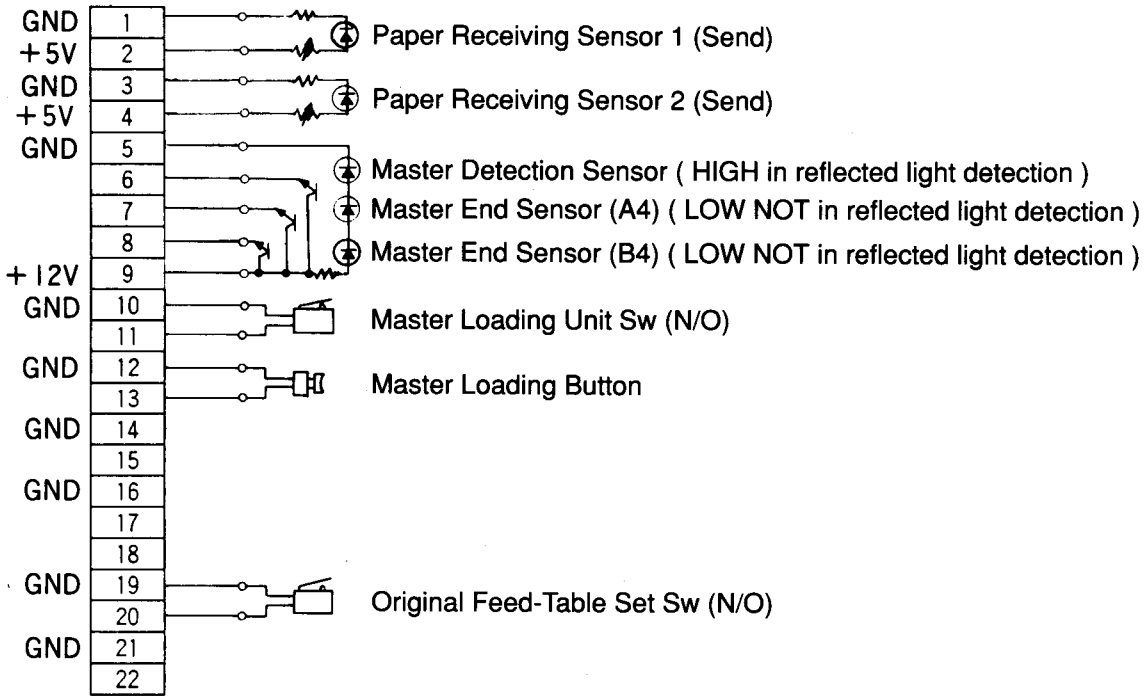
SW1:	For Main Motor rotation (30 rpm)

VR

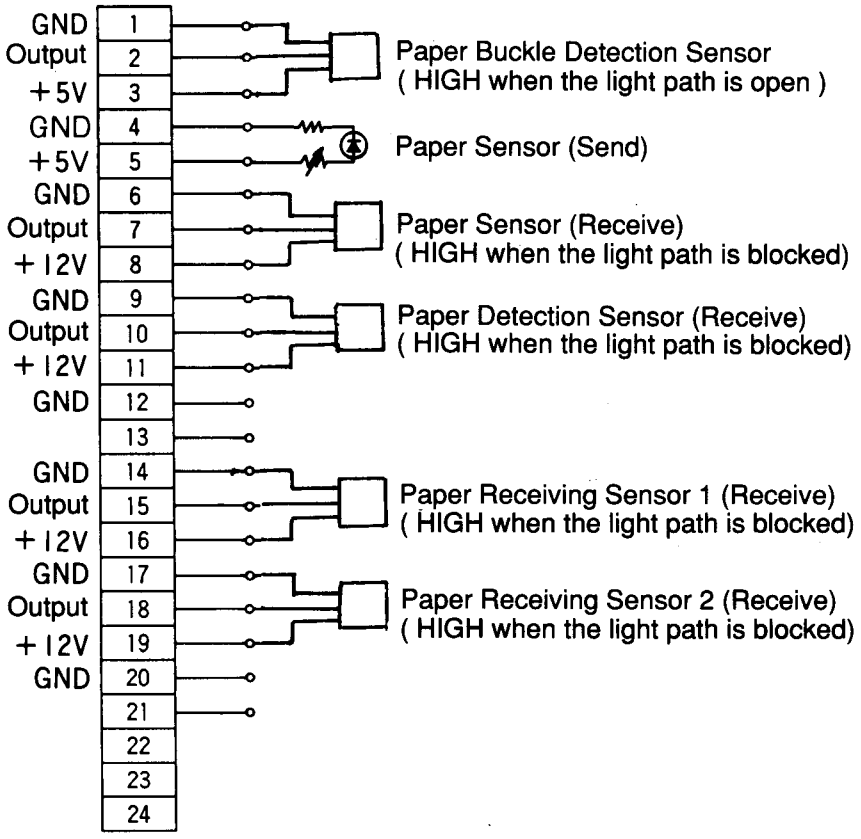
VR1	For detection sensitivity adjustment of Master Detection Sensor (The sensitivity goes up by turning it clockwise.)
VR2	For detection sensitivity adjustment of Master End Sensor (A4) (The sensitivity goes up by turning it clockwise.)
VR3	For detection sensitivity adjustment of Master End Sensor (B4) (The sensitivity goes up by turning it clockwise.)
– New –	
VR4 (VR8)	For detection sensitivity adjustment of Master Sensor (The sensitivity goes up by turning it clockwise.)
VR5 (VR4)	For detection sensitivity adjustment of Master Positioning Sensor (The sensitivity goes up by turning it clockwise.)
VR6 (VR5)	For adjustment of "Free rotation speed" (The speed goes up by turning it clockwise.)
VR7 (VR6)	For adjustment of "Master loading speed" (The speed goes up by turning it clockwise.)
VR8 (VR7)	For adjustment of "Print speed" (The speed goes up by turning it clockwise.)

LED	**- When LED is ON -**
D1:MDTC	Master Detection Sensor is detecting reflected light (Master).
D2:ENDA	Master End Sensor (A4) is NOT detecting reflected light.
D3:ENDB	Master End Sensor (B4) is NOT detecting reflected light.
D4:MSEN	Master Sensor is detecting reflected light (Master).
D5:WAIT	Master Positioning Sensor is detecting reflected light (Master).
D6:MJAM	The light path of Master Removal Sensor is blocked.
	Not Used
D8:DRM0	0° Angular Sensor is detecting magnetism (Angular Magnet).
D9:DRM1	180° Angular Sensor is detecting magnetism (Angular Magnet). The actuator of Elevator Upper Limit Sensor is raised to open the light path.
D11:PFD1	The actuator of Paper Buckle Detection Sensor is raised to open the light path.
D12:PDTC	The light path of Paper Detection Sensor is blocked.
D13:RCV2	The light path of Paper Receiving Sensor 2 is blocked.
D14:FLOW	Overflow Sensor is detecting ink.
D15:INK	Ink Sensor is NOT detecting ink.
D16:PRSS	The light path of Pressure Detection Sensor is blocked.
D17:PFD2	The light path of Paper Feed Clutch Sensor is open
D18:RCV1	The light path of Paper Receiving Sensor 1 is blocked.
D19:PSEN	The light path of Paper Sensor is blocked.
D20:DRMA	Magnet A Detection Sensor is detecting magnetism (Magnet A).
D21:DRMC	Magnet C Detection Sensor is detecting magnetism (Magnet C-1 or -2).

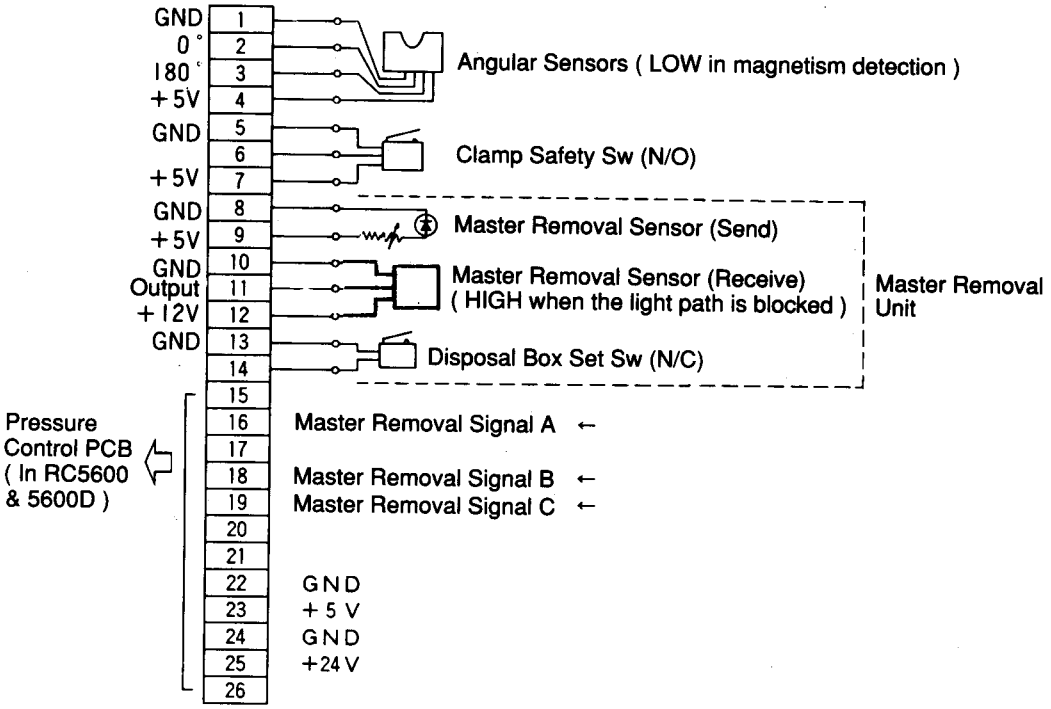
CN1 22 pins



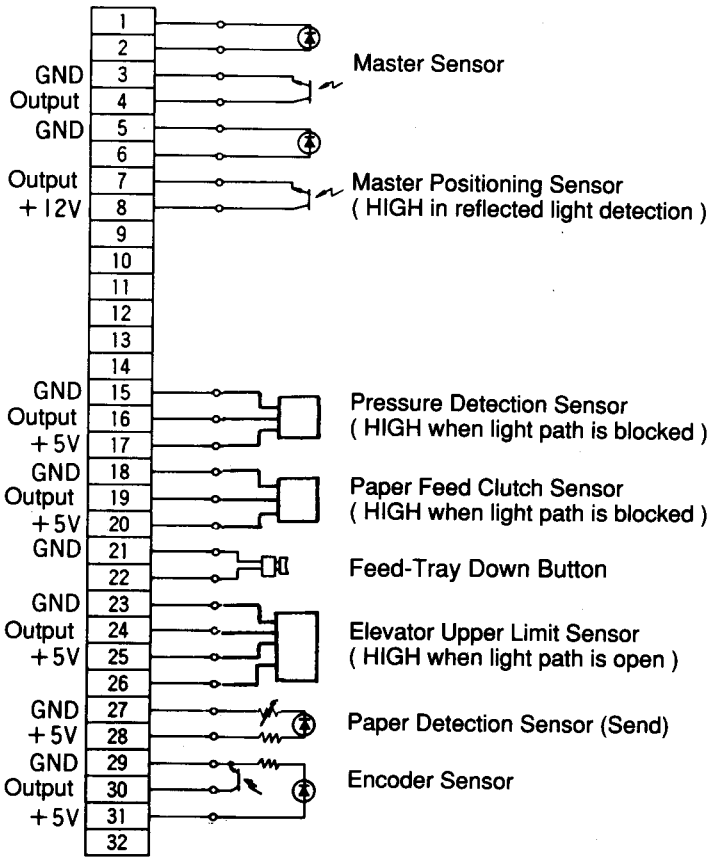
CN6 24 pins



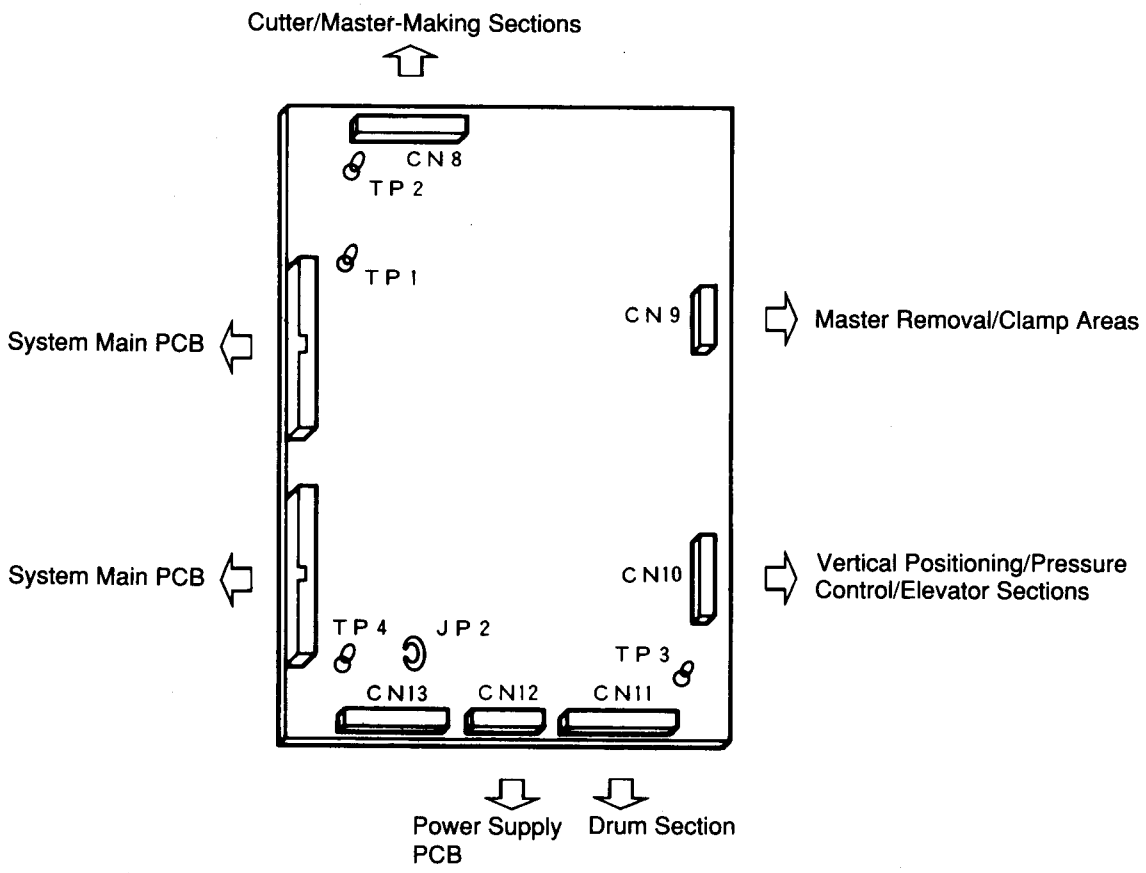
CN4 26 pins



CN5 32 pins



4. SYSTEM DRIVE PCB



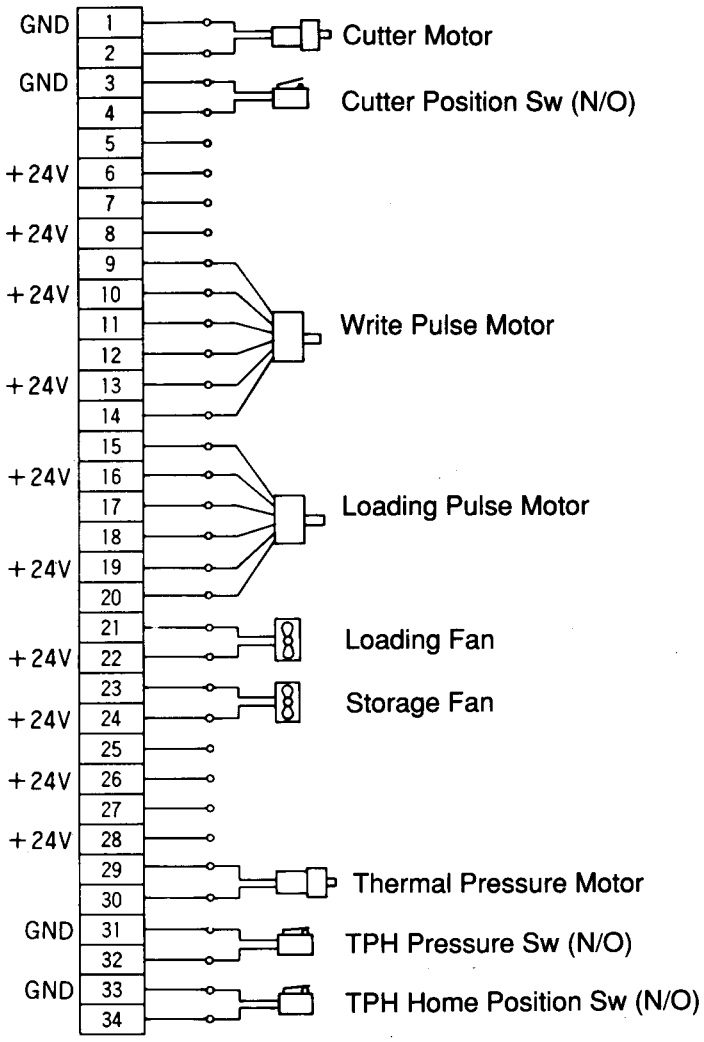
TP

TP1:GND	Ground
TP2:GND	Ground
TP3:GND	Ground
TP4:GND	Ground

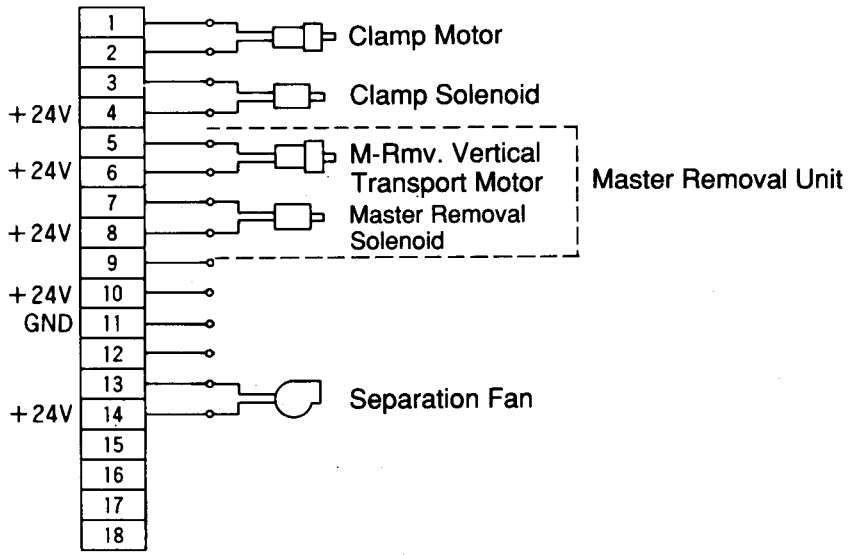
JP

JP2	Cut in connecting to Sorter

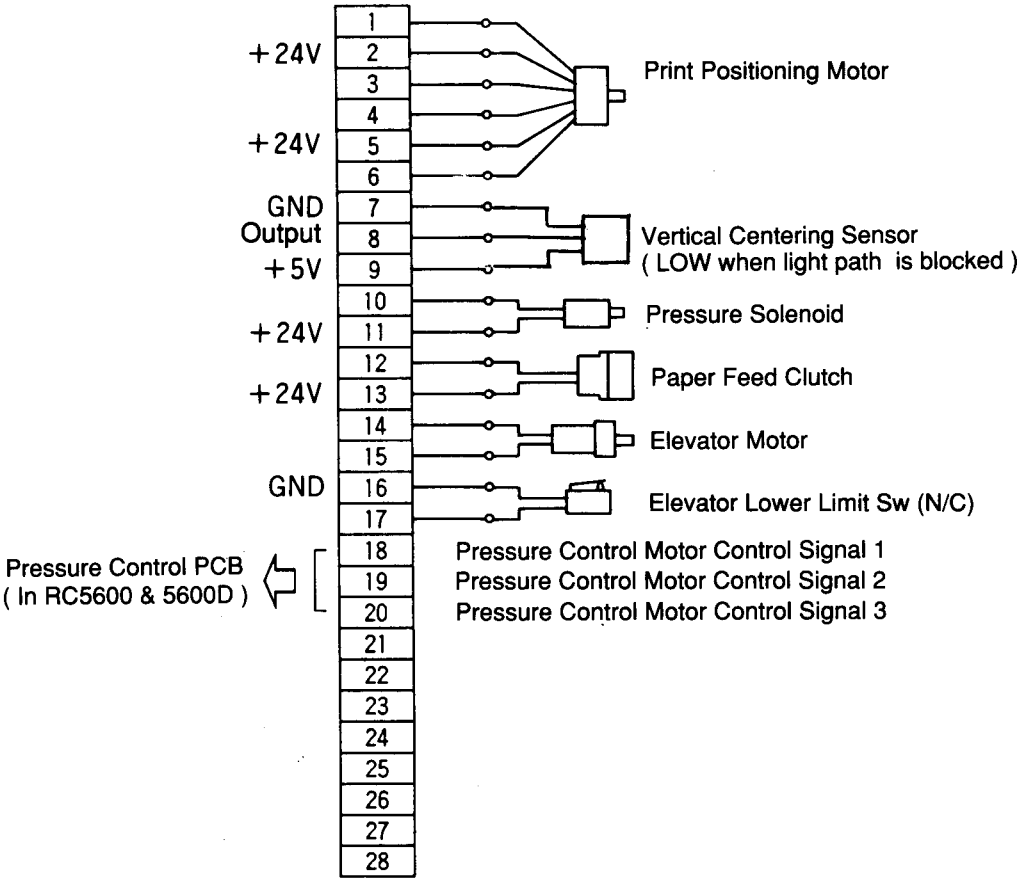
CN8 34 pins



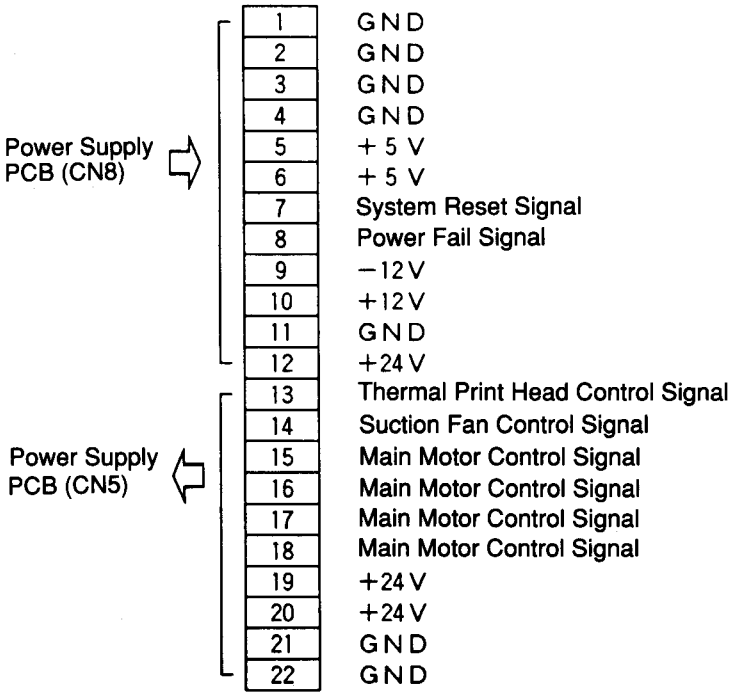
CN9 18 pins



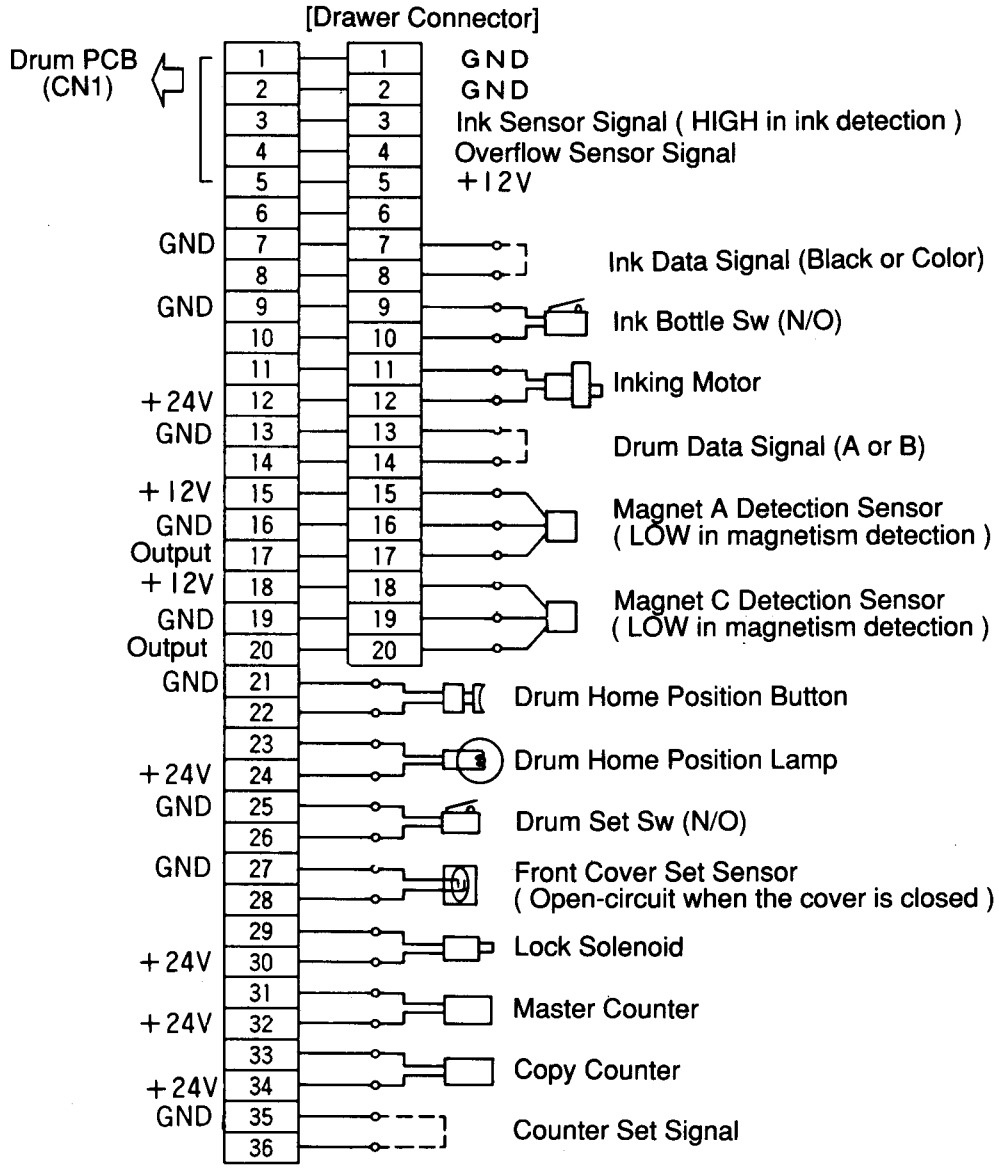
CN10 28 pins



CN12 22 pins

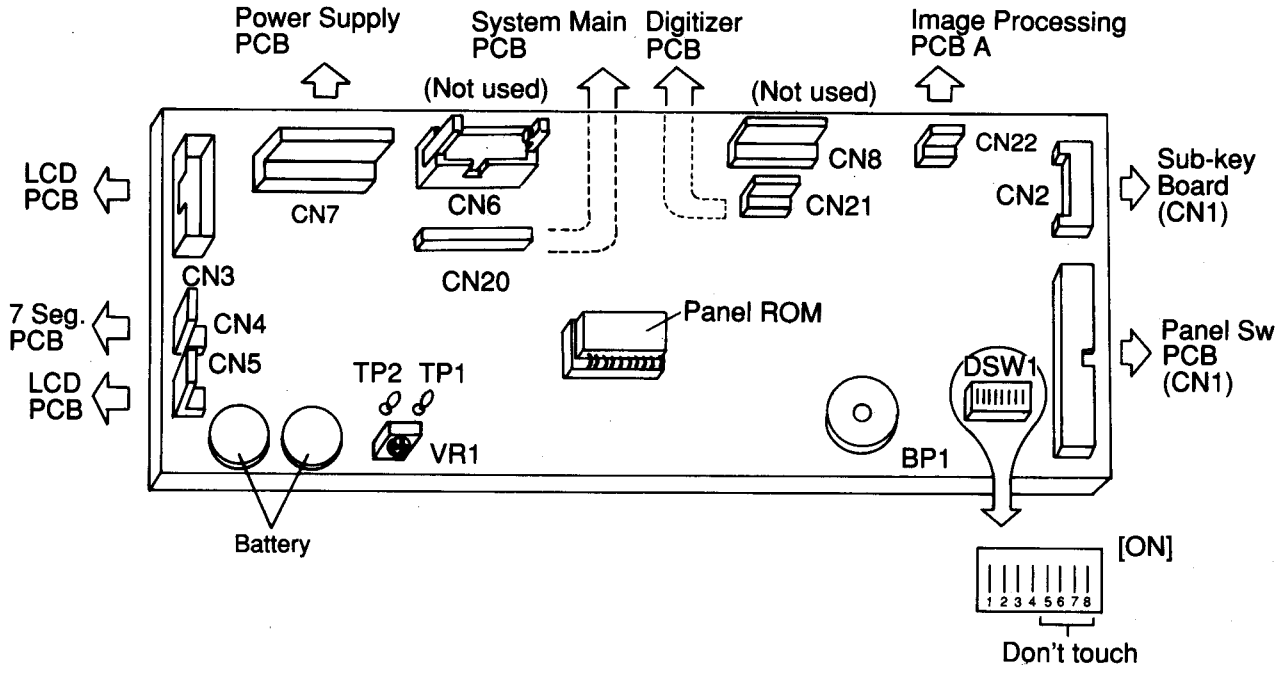


CN11 36 pins



CN13 For connection to Sorter

5. PANEL MAIN PCB



TP

TP1:GND Ground
TP2: 8 ±2V (Variable according to VR1 adjustment)

VR

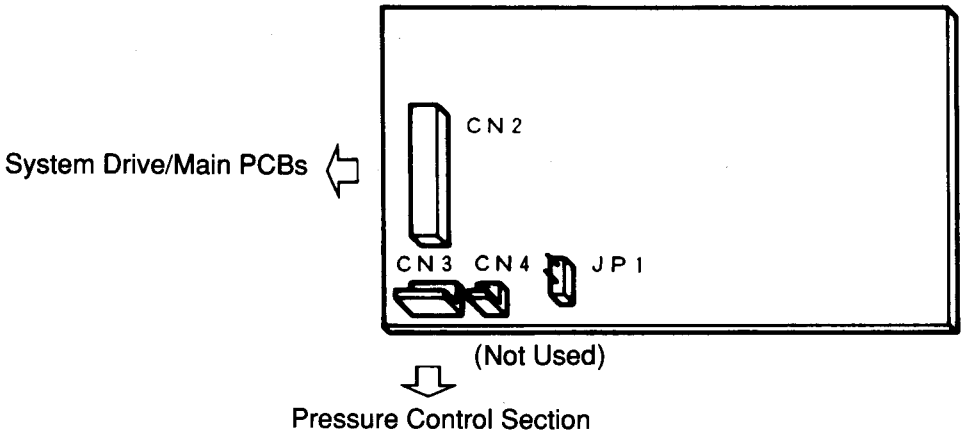
VR1 For luminosity adjustment of LCD panel

SW

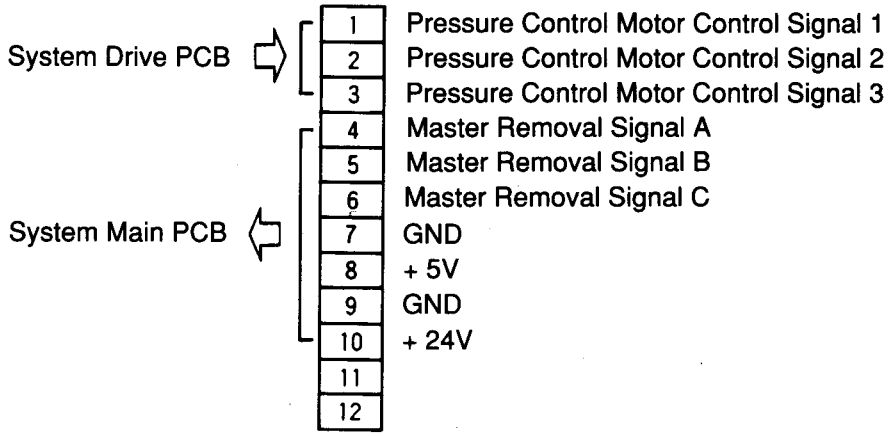
		OFF	[ON]
DSw1-1	The initial print speed selection (※)	100RPM	60RPM
DSw1-2	The initial ADF setting selection	ADF OFF	ADF ON
DSw1-3	Selection of the timer for Auto-idling	12 hours	6 hours
DSw1-4	Priority selection between Density- and Speed-Change modes	Density-Change mode	Speed-Change mode
DSw1-5	Used only for adjustment in factory		
DSw1-6	Used only for adjustment in factory		
DSw1-7	Used only for adjustment in factory		
DSw1-8	Used only for adjustment in factory		

※ Functions only in Speed-Change mode.
In Density-Change mode, the print speed is fixed at 100 rpm.

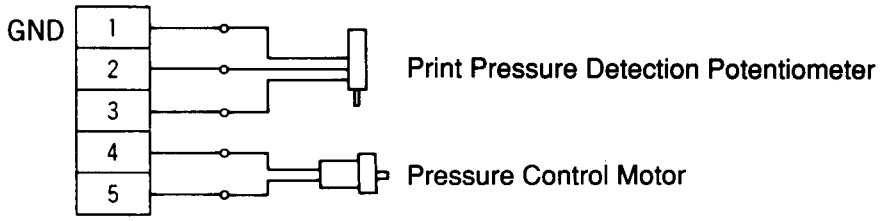
6. PRESSURE CONTROL PCB (In RC5600 & 5600D)



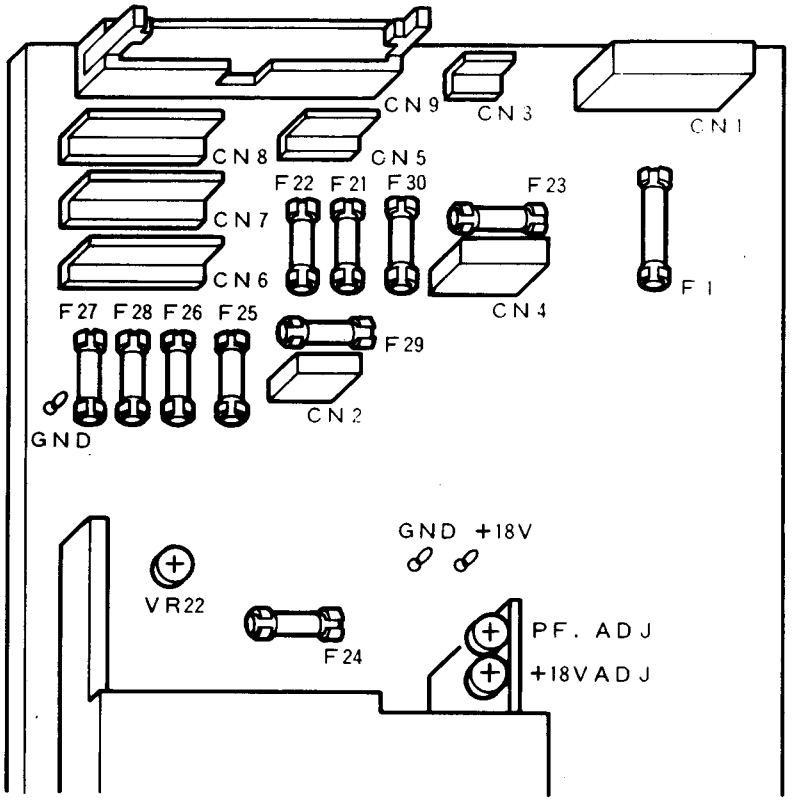
CN2



CN3



7. POWER SUPPLY PCB

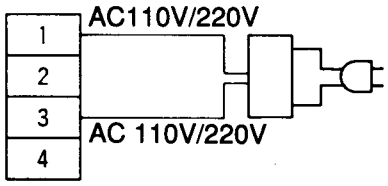


CN	CN1	From Main Power Sw
	CN2	To Main Motor
	CN3	To Suction Fan
	CN4	To Thermal Print Head
	CN5	From System Drive PCB
	CN6	Not Used
	CN7	To Panel Main PCB
	CN8	To System Drive PCB
	CN9	To Image Processing PCB A
TP	GND	Ground
	+18V	For check of +18V output
VR	VR22	For adjustment of +5V output
	PFADJ	Used only for adjustment in factory
	+18VADJ	For adjustment of +18V output (TPH Input Voltage)

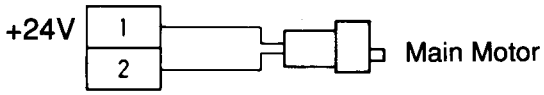
FUSE

No.	Rate	Protected line	Symptoms in case of open-circuited fuse	Relevant components
F1	10A (110V) 5A (220V)	Main Power	No Power	Main Power Sw
F21	3.15A	DC24V	No problem in printing. Master mis-feed in master-making or confidential operation.	Loading pulse motor, Loading fan, Storage fan, Thermal pressure motor, Cutter motor, Write pulse motor
F22	3.15A	DC24V	[T2: Call Service], Paper feed jam, Master removal error	M.-Rmv. vertical transport motor, Master removal solenoid, Separation fan, Pressure solenoid, Paper feed clutch, Elevator motor, Lock solenoid, Inking motor, Counters, Drum home position lamp
F23	1A	DC24 – 18V	Paper receiving jam	Suction fan
F24	8A	DC24V	[T1: Call Service]	Main Motor
F25	3.15A	DC+12V	[T4: Call Service]	Various sensors
F26	3.15A	DC–12V	No LCD indication	
F27	5A	DC5V	No Background light in LCD panel & No Print quantity indication	
F28	5A	DC5V	No power except for Suction fan	
F29	3.15A	DC24V		For optional equipments
F30	3.15A	DC24V	[T5: Call Service]	Clamp motor, Clamp solenoid, Print positioning motor, Pressure control motor, Read pulse motor, Original feed solenoid

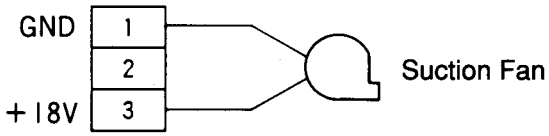
CN1 4 pins



CN2 2 pins

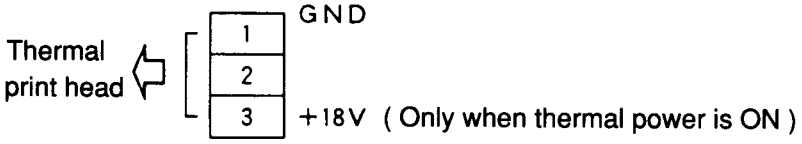


CN3 3 pins

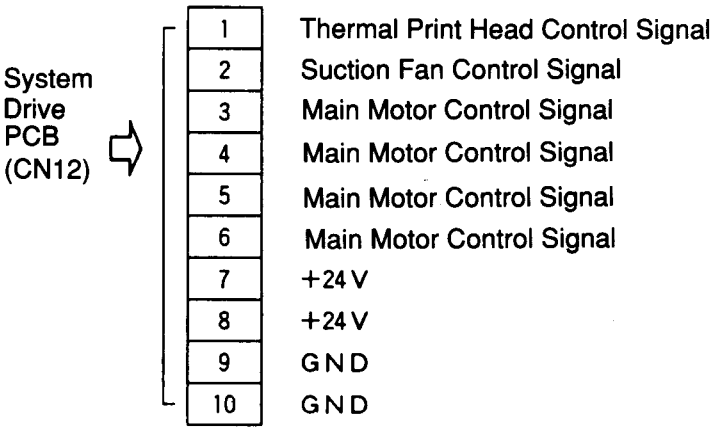


(+24V in high-speed rotation)

CN4 3 pins



CN5 10 pins



CN6 **CN7** **CN8** 12 pins

[Not Used]

Panel Main PCB (CN4) ⇦

System Drive PCB (CN12) ⇦

1	GND
2	GND
3	GND
4	GND
5	+5 V
6	+5 V
7	System Reset Signal
8	Power Fail Signal
9	−12V
10	+12V
11	GND
12	+24V

CN9 26 pins

Image Processing PCB A (CN1) ⇦

1	GND
2	GND
3	GND
4	GND
5	GND
6	GND
7	GND
8	GND
9	GND
10	GND
11	+5 V
12	+5 V
13	+5 V
14	+5 V
15	+5 V
16	+5 V
17	−12V
18	−12V
19	+12V
20	+12V
21	GND
22	GND
23	GND
24	GND
25	+24V
26	+24V